

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029004**Date Inspected:** 16-Jan-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** William Sherwood**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS Tower**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

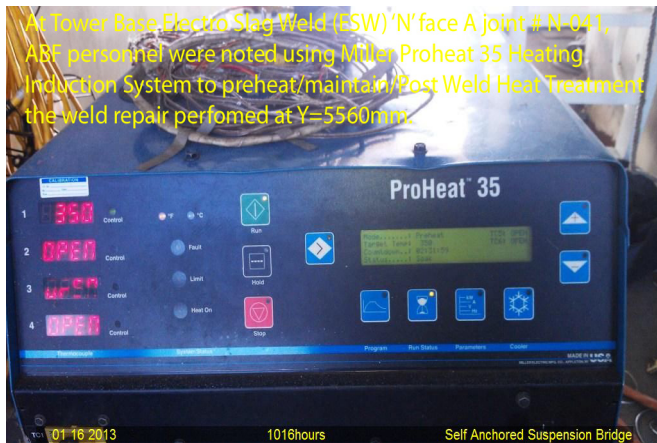
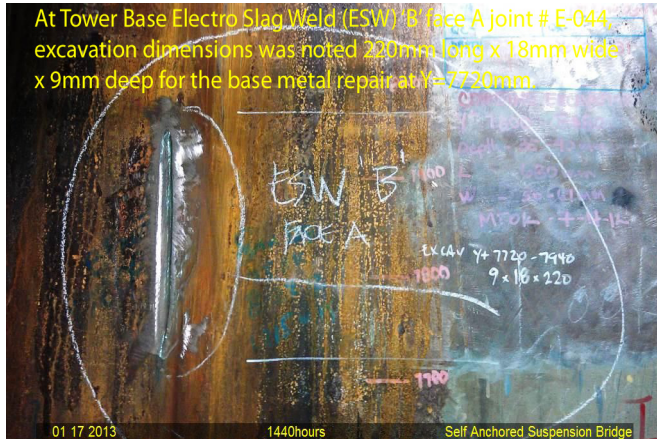
At Tower Base Electro Slag Weld (ESW) 'N' weld joint #N-041 face A, ABF welder Chris Bruce was observed performing the welding repair on the weld cover pass on previously welded ESW from Y=5460mm to Y=5660mm due to UT reject. The welder was noted utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing ABF-WPS-D15-1000 Repair Rev. 3. The welder excavated the defect using carbon air arc gouging then ground smooth the groove of the excavation. Prior to the excavation, the welder was noted preheating the repair area to 350°F using a combination of propylene gas torch and Miller Proheat 35 Induction Heating System with the heating blanket placed on the outside. After the excavation, ABF QC Steve Jensen performed the Magnetic Particle Testing (MT) of the excavation with the dimensions of 200mm long x 55mm wide x 37mm deep with no relevant indications noted. This QA performed the same test (MT) and found same result. This weld repair was performed per Request for Weld Repair (RWR) #201301-022. During the shift, ABF QC William Sherwood was noted monitoring the welding parameters and workmanship of the repair being welded. Before the end of the shift, the repair welding and the Post Weld Heat Treatment (PWHT) at this location was completed.

At Tower Base Electro Slag Weld (ESW) 'B' weld joint #E-044 face A, ABF welder James Zhen was observed performing the welding repair on the base metal from Y=7720mm to Y=7940mm due to MT reject. The welder was noted utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing

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ABF-WPS-D15-1000 Repair Rev. 3. The welder excavated the defect using disc and die grinder. Prior to excavate, the welder was noted preheating the repair area to more than 350°F using propylene gas torch. After the excavation, ABF QC Steve Jensen performed the Magnetic Particle Testing (MT) of the excavation with the following dimensions: 220mm long x 18mm wide x 9mm deep with no relevant indications noted. This QA performed the same test (MT) and found same result. This weld repair was performed per Request for Weld Repair (RWR) #201301-019. During the shift, ABF QC William Sherwood was noted monitoring the welding parameters and workmanship of the repair being welded. At the end of the shift, welding repair at location mentioned above was completed.



Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Reyes, Danny

QA Reviewer